



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
09/966,097	10/01/2001	Xiaofan Zhu	N36-137137M/TH	4777
30743	7590	10-15-2003		
WHITHAM, CURTIS & CHRISTOFFERSON, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190			EXAMINER	
			HEALY, BRIAN	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 10/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/966,097	ZHU, XIAOFAN
	Examiner Brian M. Healy	Art Unit 2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) 1-11 is/are allowed.
- 6) Claim(s) 12-14 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 07 November 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) Interview Summary (PTO-413) Paper No(s) ____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: *attached office action*

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-11 are allowed.

None of the references of record teaches or suggests the claimed optical module including a plurality of collimators between an input and output side with at least one of the collimators is made different from the other collimators in at least one variable characteristics parameter is selected from parameters such as a distance between a focal point of a lens and a light exit or incident surface, a numerical aperture of the light exit or incident surface, an effective focal length of the lens, a wavelength used and a distance between optical axes of adjacent ones of the collimators so that the size and position of a beam waist on the input side are made approximately coincident with those on the output side. These limitations are recited in claims 1-11.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Rees et. Al.,

U.S.P. No.4,331,380.

Art Unit: 2874

Rees et. Al. 380' teaches (Figs.8-14) a wedge shaped rod lens array comprising: a plurality of gradient index rod lenses 116,112,72,20 placed flush in a structure or frame 10,18,114 with plural gradient index rod lenses extending in rows that are parallel to an optical axis direction with the plural lenses have been inclined with respect to the optical axes. It is inherent that optical fibers can be used in conjunction with the gradient index array. The teachings of Rees et. al. 380' clearly, fully meets Applicant's claimed limitations.

The following references are also cited by the Examiner as being pertinent prior art: Li, U.S.P. No.6,526,196(Figs.1-8), Mandella, U.S. Patent Application Publication No.2002/0021868 A1. (Figs.1-7B), Jing, U.S.P. No.6,424,759 B1 (Figs.1-6), Lin, U.S.P. No.5,960,132 (Figs.1-19), Sato et. Al., U.S. Patent Application Publication 2003/0128437A1 (Figs.1-16) and Harrigan et. al., U.S.P. No.4,589,736 (Figs.1-6).

Any questions concerning this office action should be directed to:

Brian M. Healy

Primary Examiner

Art Unit: 2874

Phone: (703)308-2693

